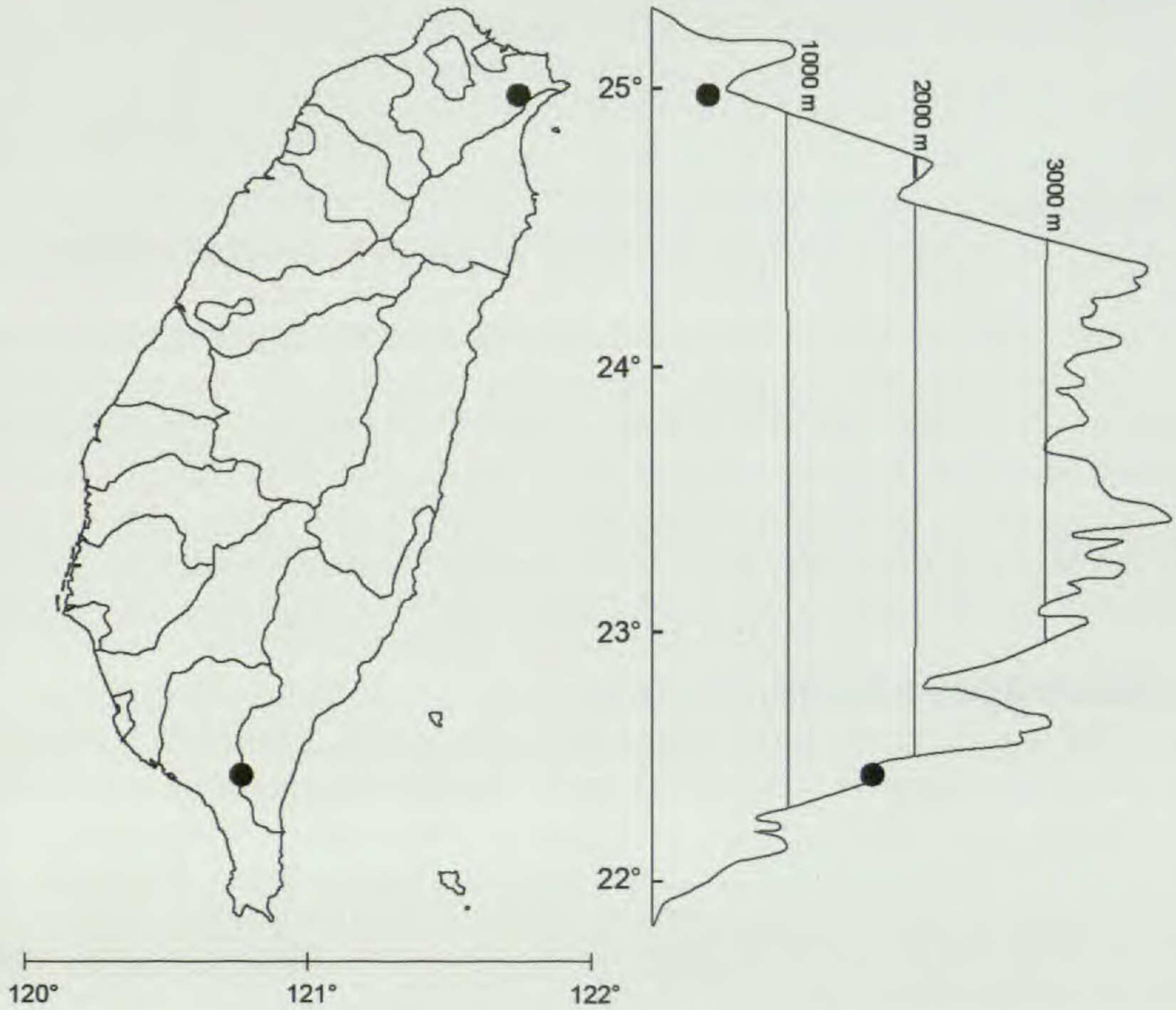

FIG. 2. Distribution map.

Cambridge, UK. 2001) and the guidelines for application of IUCN Red List criteria at regional levels (IUCN, Guidelines for application of IUCN Red List criteria at regional levels: Version 3.0. Species Survival Commission, IUCN, Gland, Switzerland, and Cambridge, UK. 2003).

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New Records of Ferns from Northeastern Argentina and Uruguay.—Four records of ferns are reported here for the first time, two species for northeastern Argentina and two others for Uruguay. In addition, the occurrence of other species is documented with herbarium specimens for both countries. The new distribution records are supported by recent collections done by the authors

and by specimens studied at CTES Herbarium. The collections that document the distribution extensions for Argentina come from Misiones. This area belongs to the Amazonian domain (Cabrera and Willink, Biogeografía de América Latina, Serie Biología 13, Secretaría de la OEA, pp. 117. Washington D.C. 1973), and it represents the greatest center of pteridophyte diversity in Argentina (Ponce *et al.*, Revista Chilena Hist. Nat. 75: 703–717. 2002).

Uruguay is inside the "Chaqueño" phytogeographical domain, in the "Pampeana" province of Cabrera and Willink (1973), which is characterized principally by grass prairies. This country presents a high level of diversity of ligneous species, probably due to high variability of environments across short distances, and also because of sharing a connection with Brazil's southern flora. The floristic connection raises the possibility that many species should reach the limit of their natural distributions in Uruguay (Brussa and Grela, Flora arbórea del Uruguay. Con énfasis en las especies de Rivera y Tacuarembó, pp. 65, COFUSA, Montevideo. 2007).

Since the works published by Osten and Herter (Anales Mus. Hist. Nat. Montevideo ser. 2, 3:109–256. 1925) and Legrand and Lombardo (Flora del Uruguay I, Pteridophyta, Museo Nacional de Historia Natural, Montevideo, pp. 67. 1958), few contributions have been made to the pteridophyte flora of Uruguay. The Catalogue of Vascular Plants of the Southern Cone edited by Zuloaga, Morrone and Belgrano (Monogr. Syst. Bot. Missouri Bot. Gard., vol. 1. 2008) overlooks part of the diversity of ferns and lycophytes present in this country; with this note, a small step is taken to fill in this gap.

Deparia petersenii (Kunze) M. Kato, Bot. Mag. (Tokyo) 90(1017):37. 1977.

Asplenium petersenii Kunze, Analecta Pteridogr. 24. 1837. *Diplazium petersenii* (Kunze) H. Christ, Bull. Acad. Int. Géogr. Bot. 245. 1902.

DESCRIPTIONS AND ICONOGRAPHIES.—Sehnem, Aspidiáceas, 307–308, f. 75, (*sub nomen D. intercalatum* H. Christ) in Reitz (ed.), *Flora Ilustrada Catarinense* Parte I (ASPI) Itajaí, SC, Brasil. 1979; Cislinski, J. (Acta Bot. Bras. 10(1): 67, f. 2 A–C, 5 C, 6 C. 1996).

DISTRIBUTION AND COMMENTARIES.—This fern grows in Asia, Pacific Islands, and Australia, and it was introduced in southeastern United States (Kato, *Diplazium* Sw. and *Deparia* Hook. & Grev., pp. 254–255, in Flora of North America Editorial Committee, Flora of North America. vol. 2. Oxford University, N.Y. 1993). In South America, the species was cited by Cislinski (1996) for states of southeastern and southern Brazil. The species is reported here for the first time from Argentina, where it was collected on a rocky slope by the side of a road in Misiones.

This fern, with blade pinnate-pinnatifid, is characterized by possessing multicellular hairs on both sides of the leaves (Cislinski, 1996).

Kato's treatment of *Diplazium* and *Deparia* (1993) considered both genera as separate and distinct, justifying this separation based on the non-decurrent

costal grooves and the presence of multicellular hairs on blades in *Deparia*. This treatment is accepted here.

SPECIMEN STUDIED: Argentina, Misiones, Dpto. Montecarlo, Ruta Nacional 12, S26°40′36.9″, W54°47′07.8″, 1-IX-2008, *Keller 5943* (CTES).

Doryopteris collina (Raddi) J. Sm., J. Bot. (Hooker) 4: 163. 1841.

DESCRIPTIONS AND ICONOGRAPHIES: Sehnem, Pteridáceas, 161–162. f. 38–2, *in* Reitz (ed.), *Flora Ilustrada Catarinense* Parte I (PTER) Itajaí, S.C., Brasil. 1972.

DISTRIBUTION AND COMMENTARIES: This taxon is distributed in Trinidad, Guianas, Paraguay and different states from the northeastern, southeastern and southern regions of Brazil (Pichi Sermolli & Bizzarri, Webbia 60 (1): 226–228. 2005). With this new record, eight species of *Doryopteris* are represented in Argentina. The studied specimen represents the only known population for this country and was collected on rocky slopes inside forest.

As *Doryopteris concolor* (Langsd. & Fisch.) Kuhn, *D. collina* is separated from other species of *Doryopteris* J. Sm. present in Argentina by the wing-angled petiole, but with a less divided lamina.

SPECIMEN STUDIED: Argentina, Misiones, Dpto. San Ignacio, Club del Río, 8-II-2009, *Keller & Paredes 6530* (CTES).

Ophioglossum reticulatum L., Sp. Pl. 2: 1063. 1753.

DESCRIPTIONS AND ICONOGRAPHIES: Sehnem, Ophioglóssaceas, 4–6, f. 1–6, *in* Reitz (ed.), *Flora Ilustrada Catarinense* Parte I (OFIO) Itajaí, S.C., Brasil. 1979.

DISTRIBUTION AND COMMENTARIES: This species presents a tropical and subtropical distribution in both hemispheres. It is known in Africa, Asia, Australia, and in America it grows in the southwest of the United States (*sub nomen Ophioglossum petiolatum* Hook., Wagner & Wagner, Ophioglossaceae, pp. 85–106, *in* Flora of North America Editorial Committee.1993), Mexico, Central and South America to Paraguay, Brazil, and Argentina (Mickel and Smith, Memoirs of The New York Botanical Garden 88:432–433. 2004). The most southern population of the Southern Cone was registered in the delta of the Paraná River, in Buenos Aires, near the latitude of 34°22′ S. This taxon grows in disturbed or moderately disturbed places, generally in the herbaceous layer in forests degraded by pasturing or in the woody edges, but always in the protection of a shrubby or arboreal layer. However, it can also inhabit pastures, commonly dominated by *Andropogon*, since these grasses afford the fern some protection.

The population in Uruguay mentioned in this note was in the border of a plantation of *Pinus elliottii* Engelm., growing among a layer of pine needles,

next to inundated soil. *Ophioglossum reticulatum* is distinguished from the other two present species in Uruguay, *O. crotalophoroides* Walter and *O. nudicaule* L *f.*, for its epigeous petioles up to 10 cm in length; its cordate blade, and cylindrical rhizome. The other two species possess underground petioles of less than 6 cm in length, blades subcordate and ovate, and rhizomes globose and subcylindrical, respectively.

SPECIMEN STUDIED: Uruguay, Dpto. Rivera, Cofusa, Estableciemento Batoví, Arroyo Batoví, S 31°02′08″, W 55°24′46.20″, *Brussa & Grela s.n.* (MNJB 23211).

Serpocaulon catharinae (Langsd. & Fisch.) A. R. Sm., Taxon 55(4):928. 2006.

Polypodium catharinae Langsd. & Fisch., Pl. Voy. Russes Monde 1, t. 9. 1810.

Goniophlebium catharinae (Langsd. & Fisch.) J. Sm. in Hook., Gen. Fil. [Hooker], t. 51. 1840.

DESCRIPTIONS AND ICONOGRAPHIES: Hensen, Nova Hedwigia 50 (3–4):292–293, fig. 9, 38–39, 64. 1990; Labiak & Prado, Bol. Inst. Bot. (Sao Paulo) 11:51, fig. 7 P. 1998; Sehnem, Polipodiáceae, 105–109, f. 33, in Reitz (ed.) *Flora Ilustrada Catarinense* Parte I (POLI) Itajaí, SC, Brasil, 1970 (all *sub nomen P. catharinae*).

DISTRIBUTION AND COMMENTARIES: This species was mentioned from Bahia, and seven states of southern and south of Brazil, Uruguay, Argentina, and Paraguay (Labiak and Prado, Amer. Fern J. 98 (3):139–159. 2008).

This species was cited previously by Legrand and Lombardo (1958) as being in Uruguay, and it was recorded also for Argentina by Hicken (Apuntes Hist. Nat. 1: 161. 1909), in Misiones province. The previous works that mentioned this species being in Argentina and Uruguay have not been documented with herbarium specimens. Whit this report, *S. catharinae* is officially documented for the first time for Argentina and Uruguay.

Serpocaulon catharinae has an epiphytic habit, is very common in the Uruguayan East, and it grows in association with *Butia capitata* Becc. palm groves. This fern has been collected in almost the totality of the state ("department") of Rocha, and in the southern portion of Treinta y Tres and eastern Maldonado. Surely it is also in the state of Cerro Largo in the zone of Butia (Becc.) Becc. palm grove. A specimen of this species was found on an island in the mouth of the Santa Lucia River, in the limit of Montevideo with San José, on a specimen of *Myoporum laetum* G. Forst.; this would be the most western distribution in Uruguay. In Argentina this species has been documented only for the locality mentioned below.

SPECIMENS STUDIED: Argentina, Dpto. San Pedro, Parque Provincial Moconá, 16-XII-1992, *Seijo et al. 197* (CTES). Uruguay, Dpto. Rocha, Arroyo Zanja Honda. 20-II-2005, *Dematteis & Schinini 1656* (CTES).

Serpocaulon latipes (Langsd. & Fisch.) A.R.Sm., Taxon 55(4):928. 2006.

Polypodium latipes Langsd. & Fisch., Pl. Voy. Russes Monde 10, t. 10. 1810.

DESCRIPTIONS AND ICONOGRAPHIES: Hensen, 1990:299–301, fig. 14–16, 35, 54, 69; Labiak & Prado, 1998:53, fig. 7, Q; Sehnem, Polipodiáceae, 103–105, f. 32 (*op. cit.*), (all sub *P. latipes*).

DISTRIBUTION AND COMMENTARIES: This species occurs in southern Brazil, Paraguay, Bolivia, and northeastern Argentina (de la Sota, Opera Lilloana V:151–162, 1960). *Serpocaulon latipes* grows as a terrestrial, inside forests. This taxon usually is confused with *S. catharinae*, but as noted by Labiak and Prado (1998) and Hensen (1990), *Serpocaulon latipes* has fronds that are distantly spaced, whereas *S. catharinae* has closely-spaced petioles. Another character that we have found useful to differentiate both species is the silver-colored rhizome of *S. catharinae* that, when the scales fall off, leave exposed in certain places the pruinose layer which is deposited beneath them. This last feature was also mentioned by Labiak and Prado (2008) to differentiate both species.

With this new record *Serpocaulon* is represented by two species in Uruguay.

SPECIMEN STUDIED: Uruguay, Dpto. Rocha, Laguna Negra, Reserva de Don Bosco, S34°5′7″, W 53°45′20″, *Bonifacino et al. 2170* (CTES).

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